Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

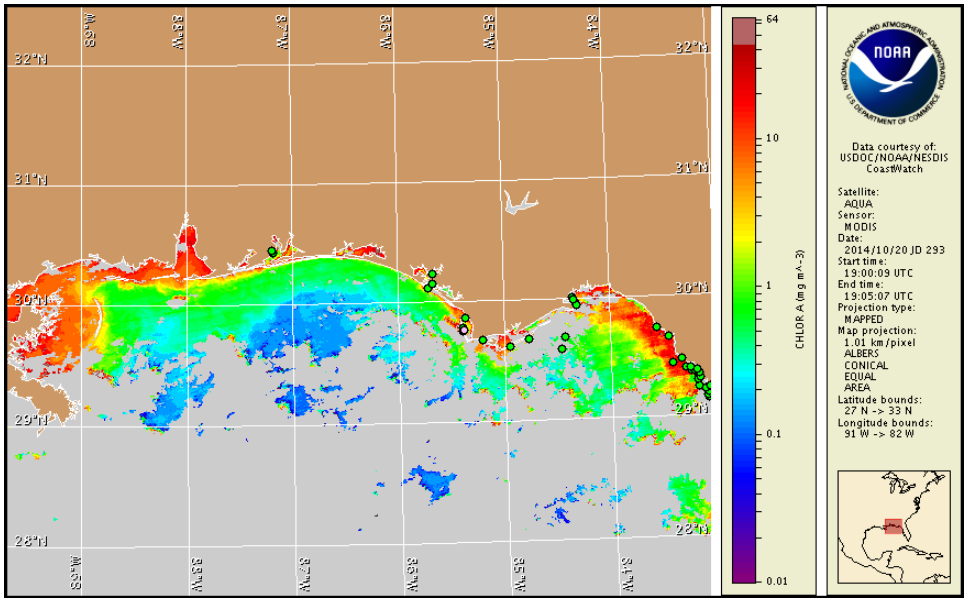
Thursday, 23 October 2014

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, October 20, 2014



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from October 13 to 22: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide: http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at: http://myfwc.com/redtidestatus

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: http://tidesandcurrents.noaa.gov/hab/bulletins.html

Conditions Report

Karenia brevis (commonly known as Florida red tide) ranges from not present to background concentrations along the coast of northwest Florida from Escambia to Taylor counties. No respiratory irritation is expected alongshore northwest Florida Thursday, October 23 through Monday, October 27.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Visit http://tidesandcurrents.noaa.gov/hab/#swfl for the most recent southwest Florida conditions report.

Analysis

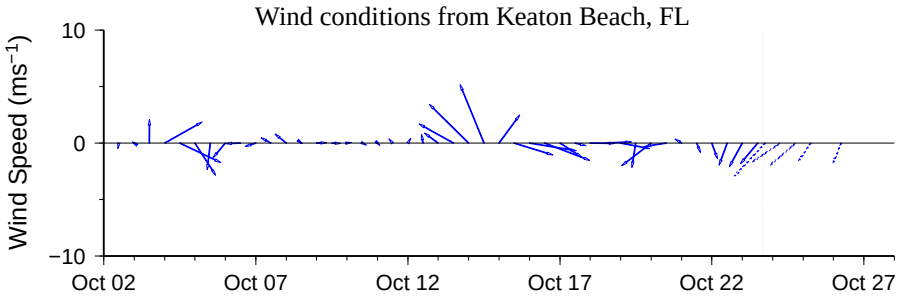
***Due to technical difficulties, the 10/20 daily merge MODIS imagery could not be displayed. Please refer to the southwest Florida bulletin for the remainder of the image. ***

Karenia brevis (commonly known as Florida red tide) ranges from not present to background concentrations along the coast of northwest Florida from Escambia to Taylor counties. Sampling over the past week in St. Joseph Bay, in Gulf County, detected one background *K. brevis* concentration (FWRI; 10/21). All other sampling alongshore and in the bay regions of Bay, Gulf, Franklin, and Wakulla counties indicated *K. brevis* is not present (FWRI; 10/17-10/21). Surface samples collected 12 and 16 miles offshore Franklin County on 10/17, in a region previously identified as having anomalously high chlorophyll, indicated *K. brevis* was not present (FWRI). No fish kills or respiratory irritation associated with *K. brevis* have been reported along the coast of northwest Florida over the past few days (MML; 10/20-10/23).

Recent MODIS Aqua imagery from 10/20 (shown left) is partially obscured by clouds along- and offshore northwest Florida from Bay to Jefferson counties. In recent imagery, patches of elevated to very high chlorophyll (2 to >20 μg/L) are visible along- and offshore Taylor County. Anomalously high chlorophyll continues to be visible, in patches, alongshore and extending up to 40 miles offshore Taylor County. Anomalously high chlorophyll noted in imagery from 10/17 through 10/19 along- and offshore Gulf to Wakulla counties is obscured by clouds in the most recent imagery. Due to the optical characteristics that are typical in the area, elevated chlorophyll is not necessarily indicative of the presence of *K. brevis*, and some elevated chlorophyll may also be due to the resuspension of benthic chlorophyll and sediments along the coast.

Northeast winds over the past several days may have promoted westerly transport of *K. brevis* concentrations. Northeast winds forecasted today through Monday may continue to promote westerly transport of *K. brevis* concentrations.

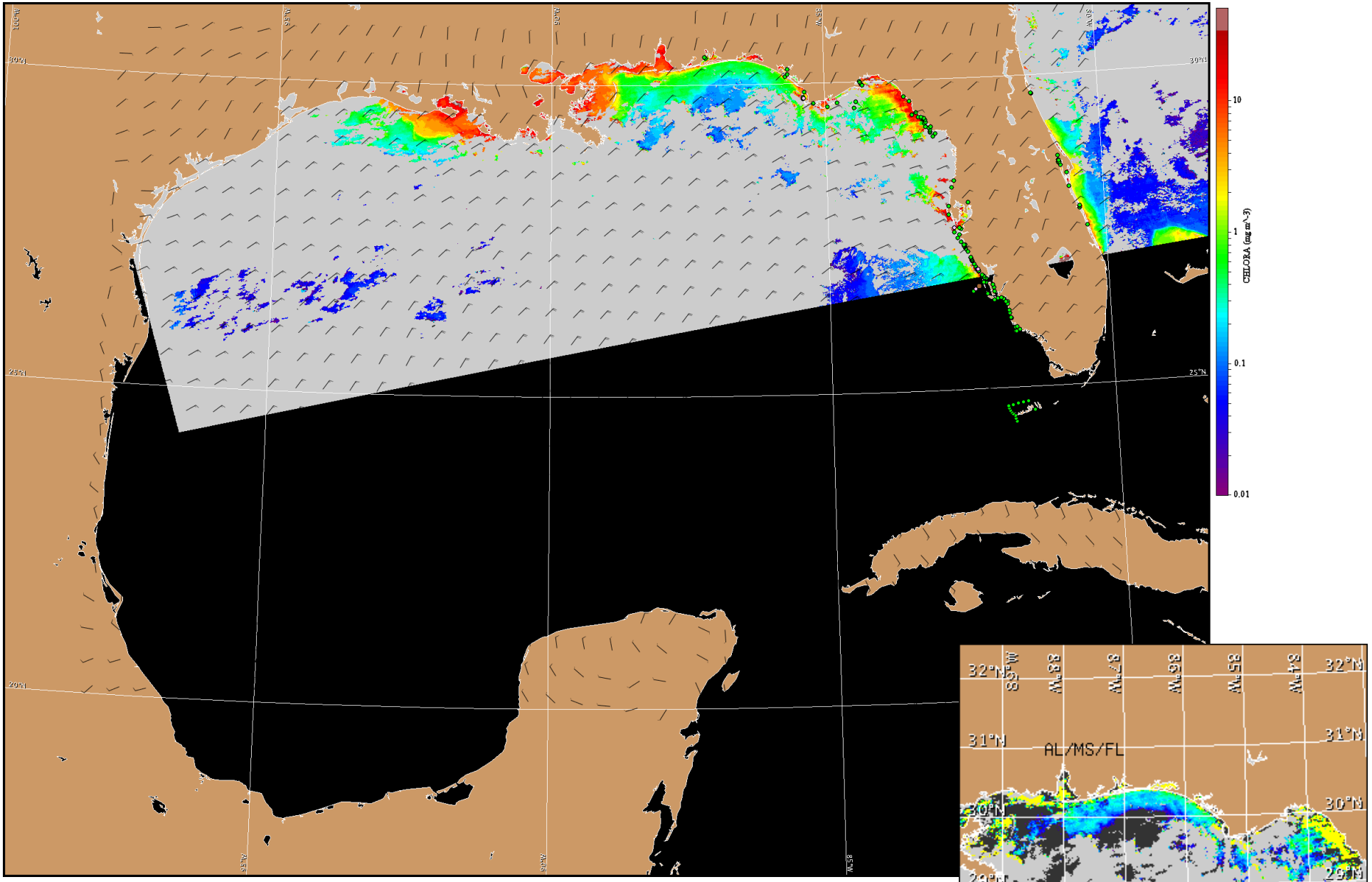
Davis, Urízar



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Taylor counties: Northeast winds (15-20kn, 8-10m/s) today. Northeast winds (10kn, 5m/s) Friday becoming north winds (10-15kn, 5-8m/s) Friday evening through Saturday. North winds (5-10kn, 3-5m/s) Sunday becoming northeast winds (5-10kn) Sunday evening before turning east (10kn) after midnight. East winds (10-15kn) Monday.



Satellite chlorophyll image and forecast winds for October 24, 2014 06Z with points representing cell concentration sampling data from October 13 to 22: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:
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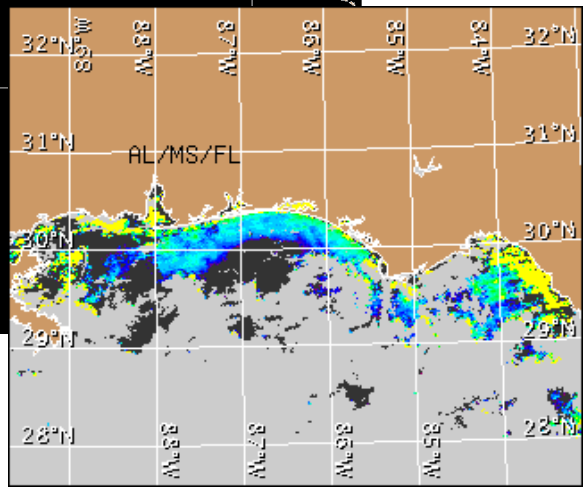

Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).